

Original Research Article

Market Competition Pattern and Development Strategies for SMEs in Computing Power Services

Junbin Le, Hong Niu, Dong Lin

Zhejiang Wanwang Information Technology Co., Ltd.

Abstract: This paper explores the characteristics of the current market environment, existing problems, and corresponding optimization strategies. It analyzes the market size and growth trends, technological innovation and competition patterns, as well as the status and role of small and medium-sized enterprises (SMEs) in the market. In response to issues such as market monopolies, insufficient competition, challenges and difficulties faced by SMEs, and deficiencies in policies and regulations, optimization strategies are proposed, including enhancing the competitiveness of SMEs, establishing a sound market mechanism and regulatory framework, and strengthening technological innovation and talent cultivation. The implementation of these measures aims to promote the optimization of the market environment and sustainable economic development.

Keywords: Market size; SMEs; Market mechanism; Technological innovation

1. Introduction

With the deepening of globalization and the continuous advancement of technology, the market environment is becoming increasingly complex and volatile, with expanding market size and rapid technological innovation. As an important component of the market economy, small and medium-sized enterprises (SMEs) are playing an increasingly significant role. However, there are still some problems in the current market environment, such as market monopolies, insufficient competition, challenges and difficulties faced by SMEs, and deficiencies in policies and regulations. These issues not only affect the healthy development of the market but also constrain the growth and expansion of SMEs. A series of optimization strategies need to be adopted to address these problems and promote market optimization and sustainable economic development.

2. Competition Pattern in Computing Power Services Market and Development Characteristics of SMEs

2.1. Market Size and Growth Trends

With the deepening of globalization and the rapid development of technological progress, the current market size shows a significant growth trend. This growth is reflected not only in the traditional physical market but also in the increasingly prosperous virtual market. The expansion of market size is due to the increase in demand brought about by population growth and consumption upgrading, as well as the market expansion driven by technological innovation and business model innovation. Globally, emerging markets and developing countries are playing an increasingly important role in economic growth, with their market size growth often exceeding that of developed countries. The rise of these markets has not only injected new momentum into global economic growth but also provided new development opportunities for multinational corporations^[1].

While the market size continues to expand, the market structure is also undergoing profound changes. Consumer demands are becoming increasingly diverse and personalized, driving market segmentation and specialization. Technological progress and digital transformation continuously promote the innovation of

business models and marketing strategies, providing market participants with more development space. The growth trend of market size in the future will continue, but the growth rate may slow down due to various factors, and the changes in market structure will become more complex and diverse, requiring constant adaptation and innovation from market participants^[2].

2.2. Technological Innovation and Competition Pattern

Technological innovation is a significant force driving market development and a key element in shaping the competitive landscape. With the rapid development of technology, new technologies, products, and business formats are emerging in an endless stream, injecting new vitality into the market and leading the industry to higher levels and broader fields. The development of new-generation information technologies, especially artificial intelligence, big data, cloud computing, and the Internet of Things, is changing the world at an unprecedented pace. These technologies not only greatly enrich people's lifestyles and improve their quality of life but also play a significant role in promoting the transformation and upgrading of traditional industries. Taking artificial intelligence as an example, it has extensive applications in multiple fields such as smart manufacturing, smart healthcare, and smart finance. Through intelligent transformation, enterprises can achieve automation and intelligence in the production process, improve production efficiency, reduce production costs, and also provide consumers with more personalized, efficient, and convenient services, meeting the diverse needs of the market. Technological innovation not only brings new growth points and development opportunities to the market but also profoundly changes the competitive landscape. With the continuous emergence of new technologies and products, the boundaries of traditional markets are broken, and emerging enterprises are springing up like mushrooms, making market competition more intense^[3].

New technologies have also intensified market competition. In order to stand out in the fierce market competition, enterprises need to continuously increase their R&D investment and improve product quality and service levels to meet consumer demands. Different industries exhibit their own characteristics in the competitive landscape. Some traditional industries, such as steel and chemicals, face enormous survival pressures due to overcapacity and price wars. These industries need to accelerate technological innovation, transformation, and upgrading to improve the added value and competitiveness of their products and establish a foothold in the fierce market competition. With the deepening of globalization, international competition is also becoming increasingly fierce. To gain a foothold in the international market, enterprises need to possess stronger international competitiveness and innovation capabilities. This means that enterprises need to continuously pay attention to the dynamics and trends of the international market, strengthen cooperation and exchanges with internationally advanced enterprises, learn from their advanced experience and technological achievements, and enhance their own competitiveness and innovation capabilities. Technological innovation is a significant force driving market development and a key factor in forming the competitive landscape. Governments, enterprises, and society as a whole should work together to increase investment in technological innovation, promote in-depth development of technological innovation and industrial upgrading, and provide strong support for sustainable economic development^[4].

2.3. The Status and Role of SMEs in the Market

As an important component of the market economy, small and medium-sized enterprises (SMEs) occupy a significant position in the market and play an irreplaceable role. SMEs are a vital source of market innovation.

Due to their relatively small size and flexible operations, SMEs are more adept at adapting to market changes and shifts in consumer demands, making them more conducive to technological innovation and business model innovation^[5]. SMEs also play a crucial role in promoting employment and economic development. They typically absorb more labor and provide more job opportunities. SMEs are one of the important drivers of economic growth, and their rapid development can stimulate the growth of related industries and the overall economy. SMEs also play a significant role in promoting market competition and diversity. Their presence makes the market more diverse and competitive, which is beneficial for consumers to have more choices and better services. Moreover, SMEs can provide valuable supplements and support to large enterprises, forming a complementary and collaborative market relationship.

3. Issues in the Competition Pattern of Computing Power Services Market and the Development of SMEs

3.1. Market Monopolies and Insufficient Competition

In today's market economy, market monopolies and insufficient competition are two prominent issues. Market monopolies are mainly manifested in a few large enterprises dominating the market by leveraging their advantages in capital, technology, branding, etc., thus controlling the market. These companies often limit market competition through mergers and acquisitions, production restrictions, and price increases, making it difficult for other businesses to enter the market or survive. This monopoly not only harms consumers but also hinders the healthy development of the market.

Insufficient competition is also a significant problem in the market. In some industries, high entry barriers, technical complexity, and substantial capital requirements make it difficult for new businesses to enter, leading to a long-term dominance by a few companies. This lack of competition reduces the incentive for innovation, saps market vitality, and is detrimental to long-term economic development. To address market monopolies and insufficient competition, the government needs to strengthen regulation, establish fairer and more reasonable market rules, break down market barriers, encourage new entrants, and intensify competition. It is also necessary to enhance the enforcement of antitrust laws, severely punish violations, and maintain fair competition in the market.

3.2. Challenges and Difficulties Faced by SMEs

SMEs hold an important position in the national economy but also face numerous challenges and difficulties. SMEs are relatively weak in terms of funds, technology, and talent, making it difficult for them to compete with larger enterprises. They face higher operational risks and can easily encounter difficulties with market changes or poor management. SMEs also struggle with unstable policy environments, financing difficulties, and heavy tax burdens. To address these challenges, the government needs to increase support for SMEs, formulate more favorable policies, reduce operating costs, and enhance their competitiveness. It is essential to strengthen training and services for SMEs, improve their management and innovation capabilities, and also to enhance the financing system for SMEs, providing more convenient financing channels and reducing their financing costs.

3.3. Insufficiencies in Policies and Regulations

Insufficiencies in policies and regulations are also significant issues in the current development of the market economy. Some policies are not scientifically or reasonably formulated, leading to poor execution or

even negative impacts. Some regulations are not comprehensive or rigorous, resulting in market violations and damage to fair competition and consumer interests. To address these issues, the government needs to strengthen policy research and regulation formulation, develop more scientific, reasonable, and comprehensive policies and regulations. It is crucial to enhance the enforcement of policies and the regulation of the market, ensure effective implementation and compliance with policies and regulations, and also to Step up public awareness and education about policies and regulations, improving public knowledge and compliance.

4. Optimization Strategies for the Competition Pattern in Computing Power Services Market and SME Development

4.1. Enhancing the Competitiveness of SMEs

Faced with the increasingly fierce market competition, SMEs confront unprecedented challenges and opportunities. In such an environment, it is crucial to enhance the competitiveness of SMEs, which is vital for their survival and growth. Brand building is of paramount importance for SMEs. In a competitive market, a brand serves as a bridge of trust and loyalty between a company and its consumers. SMEs should focus on improving product quality and service levels to build a positive corporate image, which not only increases consumer trust and loyalty but also wins a larger market share. SMEs need to strengthen their marketing capabilities, accurately identify market demands, and develop effective marketing strategies, which are key to standing out in the market. By closely monitoring market dynamics and consumer demand changes, SMEs can flexibly adjust their market strategies to adapt to market changes. Effective market promotion and publicity can enhance brand recognition and reputation, attracting more potential customers and improving market share and profitability.

Innovation in management is also a significant way for SMEs to enhance their competitiveness. SMEs should actively promote management innovation, introduce modern enterprise management concepts and methods, optimize corporate organizational structures, and improve management efficiency. By strengthening internal controls, reducing operational risks, and enhancing the ability to respond to market changes, SMEs can better adapt to the market environment. Additionally, SMEs should focus on talent cultivation and introduction, strengthen staff training and skill enhancement, and provide a strong talent foundation for enterprise development. A competent team is crucial for the success of a business. The government plays a significant role in enhancing the competitiveness of SMEs. It should increase support for SMEs, formulate more favorable tax and fiscal policies, reduce operating costs for SMEs, strengthen the construction of the financing service system for SMEs, broaden financing channels, reduce financing costs, and provide adequate financial support. The government should also enhance the service system for SMEs, offering comprehensive services such as information consultation, legal advice, and technical support to help SMEs overcome practical difficulties and improve their competitiveness. Enhancing the competitiveness of SMEs requires effort from both the enterprises themselves and government support. SMEs should focus on brand building, marketing, management innovation, and talent cultivation, while the government should provide preferential policies and comprehensive services to jointly promote the healthy development of SMEs.

4.2. Establishing a Sound Market Mechanism and Regulatory Framework

Establishing a sound market mechanism and regulatory framework is crucial for optimizing the market environment, ensuring fair competition, and promoting sustainable economic development. In the current complex and volatile market environment, it is essential to fully recognize this and take effective measures to

promote the improvement of the market mechanism and regulatory framework. Perfecting the market competition mechanism is key. To break down industry barriers and regional restrictions, it is necessary to deepen market reforms and promote the free flow of resources on a larger scale. This means reducing direct government intervention in the market and allowing the market to play a decisive role. Strengthening antitrust and anti-unfair competition law enforcement, cracking down on various forms of market monopolies and malicious competition, and ensuring fair market competition are also essential. Establishing a robust information disclosure system and improving market transparency are necessary to reduce information asymmetry and provide a fair competitive environment for market participants.

Perfecting the legal and regulatory framework is for protection. Laws and regulations are the fundamental rules of the market and important tools for maintaining market order and fair competition. It is essential to strengthen the formulation and revision of laws and regulations to ensure their timeliness and applicability. This requires closely monitoring market dynamics and the development of emerging business formats, and promptly revising and improving relevant laws and regulations. Strengthening the propaganda and popularization of laws and regulations, and improving the legal awareness and compliance of market participants are also necessary. Only by making everyone understand where the legal boundaries lie can a good atmosphere of law-abiding be formed. Establishing and strengthening law enforcement agencies and teams are indispensable. Law enforcement agencies and teams are the executors of laws and regulations, and their quality and level directly affect the enforcement effect of laws and regulations. It is necessary to strengthen the construction of law enforcement agencies and teams, improve their professionalism and law enforcement capabilities, and strengthen law enforcement supervision and accountability mechanisms. Ensuring a fair, just, and transparent law enforcement process, and severely investigating and punishing non-enforcement and illegal non-pursuit behaviors are essential to form an effective deterrent. The government should play a leading role in this process, as it is the driver and regulator of the market mechanism and regulatory framework. The government should strengthen market regulation and law enforcement, promote the improvement of the market mechanism and regulatory framework, and encourage various social sectors to participate in the construction of the market environment to form a positive situation of joint participation by the government, enterprises, and society.

4.3. Strengthening Technological Innovation and Talent Cultivation

Technological innovation is a crucial driving force for market development, serving as the "engine" that continuously propels the progress and prosperity of the market. Talent is a key factor in technological innovation and is the core driver in this wave of innovation. Strengthening technological innovation and talent cultivation is an important measure for optimizing the market environment and enhancing market competitiveness. It is vital to increase investment in technological innovation and improve technological innovation capabilities. Technological innovation is the key for enterprises to enhance competitiveness and explore new markets.

The government should increase support for technological innovation by establishing science and technology innovation funds and providing tax incentives to encourage businesses to increase investment in research and development, and to promote in-depth development of science and technology innovation activities. The government should also promote cooperation between industry, universities, and research institutions to facilitate the transformation and application of scientific and technological achievements, so that they can better serve the development of the economy and society. In addition to financial support, intellectual property protection is also an important aspect of enhancing technological innovation capabilities. Intellectual property is

an important carrier of innovation achievements, and only by protecting intellectual property rights can the legitimate rights and interests of innovation achievements be fully protected. The government should strengthen intellectual property protection, improve relevant laws and regulations, and intensify the crackdown on infringement to provide strong legal protection for innovators.

Focusing on talent cultivation and introduction is crucial for optimizing the market environment. Talent is the source of technological innovation, and only with a high-quality talent team can technological innovation and industrial development be continuously promoted. The government should increase investment in education, enhance national quality and innovation capabilities, and provide continuous talent support for technological innovation. Strengthening vocational education and skill training, improving the skill level and comprehensive quality of the workforce, and cultivating more skilled talents for enterprises are also important measures. Actively introducing high-level talents and teams from overseas is also an important measure for optimizing the market environment. Overseas high-level talents and teams possess rich innovation experience and advanced technical levels, and their involvement can bring more innovative resources and competitiveness to enterprises. The government should formulate preferential policies and provide a favorable working and living environment to attract more high-level talents and teams from overseas to develop in the country.

As a market entity, enterprises should also pay attention to technological innovation and talent cultivation. Enterprises can strengthen cooperation with universities and research institutions to introduce advanced scientific and technological achievements and talent resources, providing strong support for enterprise technological innovation. By enhancing internal training and talent cultivation mechanisms, enterprises can improve employees' innovative abilities and comprehensive qualities, and stimulate their enthusiasm and creativity for innovation. Enterprises can also encourage employees to participate in technological innovation and entrepreneurial activities, providing them with broad development opportunities. Strengthening technological innovation and talent cultivation is an important measure for optimizing the market environment and enhancing market competitiveness. The government should increase investment in technological innovation and talent cultivation, providing policy support and financial security. Enterprises should also actively participate in technological innovation and talent cultivation to improve employees' innovative abilities and comprehensive qualities. Only by doing so can enterprises seize the initiative in the new round of technological revolution and industrial transformation and achieve sustainable economic development.

5. Summary

This article analyzes the characteristics and existing problems of the current market environment and proposes corresponding optimization strategies. It is necessary to enhance the competitiveness of SMEs by focusing on brand building, management innovation, and talent cultivation to improve their market competitiveness. Establishing a sound market mechanism and regulatory framework is essential to break down market barriers and regional restrictions, promote the free flow of resources and fair competition, strengthen market supervision and law enforcement, and maintain market order and fair competition. Additionally, it is important to strengthen technological innovation and talent cultivation to enhance innovation capabilities and cultivate a high-quality talent pool, providing strong support for market optimization and sustainable economic development. Through the implementation of these measures, it is believed that further promotion of market optimization and economic prosperity can be achieved.

References

- [1] Gong Suxia. Research on the Development Status and Countermeasures of Service-oriented SMEs under the New Development Pattern: A Case Study of the Zhangjiajie Tourism Market [J]. *Market Weekly*, 2023, 36(5):6-9.
- [2] Su Lu, Wu Lingyun, Qin Yuan. Research on the Market Competitiveness Strategy of Guangxi under the New Development Pattern [J]. *Enterprise Science and Technology Development*, 2023(8):1-5.
- [3] Shi Yingchao. Research on Competitive Intelligence Services for SMEs [J]. *Inner Mongolia Science and Technology and Economy*, 2022(4):26-28.
- [4] Jiang Shengming, Zhang Benshu, Jiang Sanliang. The Development Trend and Path Selection of “Specialized, Sophisticated, and Innovative” SMEs [J]. *Fujian Forum: Humanities and Social Sciences Edition*, 2022(8):14.
- [5] Yang Ying. Strategies for Improving the Market Competitiveness of SMEs in Economic Management [J]. *Regional Governance*, 2022(2).